



## REMARKS

This is in response to the Final Office Action mailed on January 18, 2007. Claims 1-39 were pending in that action. All claims were rejected. With the present response, all claims are unchanged.

### I. THE EXAMINER'S FIRST REJECTION

Beginning on page 3 of the Office Action, the Examiner rejected claims 1-39 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,279,969. It is respectfully pointed out that the Examiner must have meant the reference to be 6,278,969 (hereinafter referred to as "the King reference"). For reasons that will be outlined below in detail, it is respectfully submitted that these claims are patentably distinguishable from that reference.

Independent claim 1 recites a method for providing information to an automatic machine translation system to improve translation accuracy. The method includes receiving an attempted translation from the automatic machine translation system and processing the attempted translation to identify an error. Notably, the claim also recites "providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic translation system."

In contrast to claim 1, the King reference describes systems and methods that do nothing to reduce the likelihood that an automatic machine translation system will repeat an error in subsequent natural language translations. In fact, the King reference expects errors to be repeated in subsequent translations. The King reference teaches maintaining a collection of errors along with corresponding corrected text. The collection of errors is simply referenced like an index and a corrected text is substituted when the same error repeats itself in subsequent translations. Make no mistake, the collection of error information maintained in accordance with the teachings of King is in no way utilized to improve a machine translation system so as to avoid making the same mistake twice. Thus, the teachings of the King reference are fundamentally different than the limitations of claim 1. For at least this reason, independent claim 1 is believed to be patentably distinguishable from the King reference.

Claims 2-16 are dependent upon independent claim 1 and were similarly rejected in view of the King reference. It is respectfully submitted that these dependent claims are patentably distinguishable from the King reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of dependent claims 2-16 are allowable based on the merit of their own claim limitations.

For example, claims 4 and 5-7 limit the claim step of receiving an automatic machine translation system to receiving by particular means of communication. In response to these claim limitations, the Examiner cites the King reference at FIGS. 1-3. FIGS. 1-3 of the King reference show several different data processing systems in which embodiments of the King reference may be implemented. However, there is absolutely no teaching in the King reference of receiving information as specifically recited in claims 1 and 4 and 5-7. These claims recite specific kinds of information being received in a very specific manner. The King reference simply neither teaches nor suggests these specific details. Certainly the Examiner has failed to point out where such features are alluded to in the King reference. In light of the absence of prior art that teaches or suggest the limitations of claims 4 and 5-7, it is respectfully submitted that these claims are in allowable for these additional reasons.

Dependent claims 8-16 further define the step in claim 1 of providing information to the automatic machine translation system. In particular, these dependent claims more specifically define the information to be assimilated into the automatic machine translation system. The King reference simply teaches substituting a corrected text for a text that contains an error. There is absolutely no teaching or suggestion of providing information to be assimilated into the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent translation. Some of the dependent claims 8-16 recite very specific ways in which the automatic machine translation system is improved to reduce the likelihood of repeating an error. There is absolutely no teaching or suggestion in the King reference of improving an automatic machine translation system as claimed. For these additional reasons, claims 8-16 are believed to be in allowable form.

Independent claim 17 also recites a method for improving the performance of an automatic machine translation system. The method includes receiving from a reliable modification source an indication of an error in at least one portion of a translation produced by the automatic machine translation system. Further, claim 17 recites “training the automatic machine translation system such that the error will be less likely to occur for subsequent translations generated by the automatic translation system.” The King reference fails to teach or suggest any training of the automatic machine translation system as claimed. As was described in the arguments related to claim 1, the King reference fully expects the same mistake to be made on numerous occasions. That is a key rationale for the functionality of the King methods and system. Thus, the King reference teaches away from the elements of claim 17. For at least these reasons, it is respectfully submitted that independent claim 17 is patentably distinguishable from the cited reference and in allowable form.

Claims 18-28 are dependent upon independent claim 17 and were similarly rejected. It is respectfully submitted that these dependent claims are patentably distinguishable from the King reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of dependent claims 18-28 are allowable based on the merit of their own claim limitations.

For example, claim 19 limits the claim step of transferring to transferring from a client computing device to a server computing device. Nothing in the King reference teaches or suggests the client-server implementation as claimed. The Examiner argues that the example environments shown in FIGS. 1-3 of the King reference somehow anticipate the elements of claims 19 and 20. However, there is absolutely no teaching or suggestion of transferring information in the FIGS. 1-3 environments in a manner that anticipates the elements of claim 19. Claim 20 recites limitations that are similarly distinguishable from the cited prior art. Claims 19 and 20 are believed to be in allowable form for these additional reasons.

Claims 21-28 define very specific ways in which training is accomplished to configure the automatic machine translation system to be less likely to repeat an error in subsequent translations. The King reference fails to teach any training method, let alone the

specific training methods recited in these dependent claims. Claims 21-28 are believed to be in allowable form for these additional reasons.

Independent claim 29 recites yet another method for improving the performance of an automatic machine translation system. The method includes generating an updated database of translation knowledge based on a corrected version of a low confidence portion of a translation. The method also includes “incorporating the updated database of translation knowledge into the automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to the low confidence portion.”

In contrast to claim 29, the King reference essentially describes an index that correlates translation errors to corrected translations. The information in this index is not used to enable an automatic machine translation system to subsequently translate with greater accuracy. Instead, the index is simply used as a replacement table. The index does nothing to avoid making the same error twice. In fact, the index depends upon the same error being made again, and again, and again. Thus, claim 29 is believed to be in allowable form at least for this reason.

Claims 30-38 are dependent upon independent claim 29 and were similarly rejected. It is respectfully submitted that these dependent claims are patentably distinguishable from the King reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of dependent claims 30-38 are allowable based on the merit of their own claim limitations.

Claims 31, 32, 35 and 36 are distinguishable from the cited King reference for reasons that have been discussed herein in detail relative to other rejected claims. These claims are simply examples of dependent claims that are believed to be in allowable form based on the merits of their own limitations.

Independent claim 39 recites a method for improving the performance of a self-customizing automatic machine translator. The method includes utilizing an automatic translator to produce training information for adapting a different automatic translator to subsequently

translate text with greater accuracy. The training information is assimilated into the different automatic translator to enable it to subsequently translate with greater accuracy.

In contrast, the King reference fails to teach or suggest any method or system automatic translation system to learn from the mistakes of another. While it may be within the scope of the King reference for multiple translation system to contribute a common index that correlates translation errors to corrections, this in no way enables the systems to avoid making the same errors again. The King reference simply fails to teach or suggest the method as claimed in claim 39.

Claims 40 and 41 are dependent upon independent claim 39 and were similarly rejected in view of the King reference. It is respectfully submitted that these dependent claims are patentably distinguishable from the King reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that these dependent claims are allowable based on the merit of their own claim limitations.

## II. THE EXAMINER'S SECOND REJECTION

On page 6 of the Office Action, the Examiner rejected claims 1, 2, 8-18, 21-28, 29-30 and 36-39 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,054,803 (hereinafter referred to as “the Eisele reference”). For reasons that will be outlined below in detail, it is respectfully submitted that these claims are patentably distinguishable from that reference.

Independent claim 1 recites a method for providing information to an automatic machine translation system to improve translation accuracy. The method includes “providing information to the automatic machine translation system to reduce the likelihood that the error will be repeated in subsequent natural language translations generated by the automatic machine translation system.”

In response to the last element of claim 1 (“providing information”), the Examiner points to the Eisele reference at column 2, lines 24-45. A close examination of this passage; however, reveals that the Eisele reference actually simply teaches methods and systems for aligning text from a first document with text in a corresponding second document that has been

translated into a different language. The reference fails to teach or suggest any method for adapting a machine translation system to prevent repeated errors. The reference simply describes aligning bilingual text based on translation accuracy. For at least this reason, it is respectfully submitted that independent claim 1 is patentably distinguishable from the cited Eisele reference.

Claims 2 and 8-16 are dependent upon independent claim 1 and were similarly rejected in view of the Eisele reference. It is respectfully submitted that these dependent claims are patentably distinguishable from the Eisele reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of these dependent claims are allowable based on the merit of their own claim limitations.

For example, claims 8-18 recite specific ways in which an automatic machine translation system is adapted in order to reduce the likelihood that a particular error will be repeated in subsequent translations generated by the automatic machine translation system. The cited Eisele reference has nothing to do with such a process. Accordingly, it is respectfully submitted that at least these dependent claims are patentable for these additional reasons.

Independent claim 17 recites a method that includes training an automatic machine translation system such that an error will be less likely to occur for subsequent translation generated by the automatic translation system. The Eisele reference fails to teach or suggest identifying an error in a translation, let alone training a translation system to be less likely to repeat the error in subsequent translations. For at least this reason, it is respectfully submitted that independent claim 17 is patentably distinguishable from the cited Eisele reference.

Dependent claims 18 and 21-28 are dependent upon independent claim 17 and were similarly rejected. It is respectfully submitted that these dependent claims are patentably distinguishable from the cited Eisele reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of these dependent claims are allowable based on the merit of their own claim limitations. For example, dependent claims 21-28 recited methods for training an automatic machine translation system to avoid repeated errors. The Eisele reference teaches or suggests no such training, let alone the very specific modes of training that are defined in the dependent claims. These are just

examples of dependent claims that are believed to be allowable based on the merit of their own limitations.

Independent claim 29 recites a method that includes incorporating an updated database of translation knowledge into an automatic machine translation system to enable the automatic machine translation system to subsequently translate with greater accuracy text similar to a low confidence portion of a translation. The cited Eisele reference fails to teach or suggest any determination of a low confidence portion of a translation as claimed. Further, the cited reference fails to teach or suggest any means of incorporating an updated database of translation knowledge into an automatic machine translation system, let alone a database that would enable the automatic machine translation system to subsequently translate with greater accuracy as claimed. For at least these reasons, it is respectfully submitted that independent claim 29 is in allowable form.

Dependent claims 30 and 36-38 are dependent upon independent claim 29 and were similarly rejected in view of the Eisele reference. It is respectfully submitted that these dependent claims are patentably distinguishable from the Eisele reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of these dependent claims are allowable based on the merit of their own claim limitations. For example, dependent claims 36-38 specifically define the method step of incorporating a database of translation knowledge. The cited Eisele reference simply has nothing to do with incorporating information into a collection of statistical parameters, a collection of parsing information, or a collection of corresponding word or phrase associations as claimed. At least these dependent claims are in allowable form for these additional reasons.

Independent claim 39 recites a method that includes assimilating training information into an automatic translator to enable to subsequently translate with greater accuracy text that contains an error. It is respectfully pointed out that the Eisele reference fails to teach or suggest any assimilation of training information that incorporates a response to an identified translation error. For at least this reason, it is respectfully submitted that independent claim 39 is in allowable form.

III. **THE EXAMINER'S THIRD REJECTION**

Beginning on page 7 of the Office Action, the Examiner rejected claims 3-7, 19-20 and 30-35 under 35 U.S.C. §103 as being unpatentable over the Eisele reference in view of "Applicant's choice of whether data is transferred from a local or remote database."

In supporting this rejection, the Examiner simply states that "the art at the time of the invention to provide for translations regardless of the source to enable users local and remote that speak different languages to communicate or understand transmctic communications." Applicant has no idea what this means. Applicant notes that absolutely no prior art has been cited in combination with the Eisele reference to support a rejection under §103. If this is an attempt to take official notice, Applicant traverses such an attempt and specifically requests that prior art be cited. Otherwise, it is respectfully requested that this rejection, which falls well short of the standards required for a legitimate rejection, be withdrawn.

IV. **THE EXAMINER'S FOURTH REJECTION**

Beginning on page 8 of the Office Action, the Examiner rejected claims 1-39 Under 35 U.S.C. §102(a) as being anticipated by WO 02/054280 to D'Agostini (hereinafter referred to as "the D'Agostini reference").

Independent claim 1 recites a method that includes processing an attempted translation and a collection of source text to identify an error in the attempted translation. In response to this element, the Examiner points to the D'Agostini reference at page 19, line 14-page 20, line 6. A close examination of this passage; however, reveals that there is no teaching or suggestion of an identification of an error in an attempted translation based on a processing of the attempted translation and the collection of corresponding source text. Error identification, in accordance with the teachings of the D'Agostini reference, is a manual process. For at least this reason, it is respectfully submitted that independent claim 1 is patentably distinguishable from the D'Agostini reference.

Dependent claims 2-16 are dependent upon independent claim 1 and were similarly rejected. It is respectfully submitted that these dependent claims are patentably distinguishable from the D'Agostini reference at least for the same reasons that their affiliated

independent claim is so distinguishable. Further, it is respectfully submitted that at least some of the dependent claims 2-16 are allowable based on the merit of their own claim limitation. For example, claims 9-15 very specifically define the kind of information provided to the automatic machine translation system to reduce the likelihood of repeating an error. These specific implementations are neither taught nor suggested by the cited D'Agostini reference. It is respectfully submitted that at least these claims are patentably for these additional reasons.

Independent claim 17 recites a method that includes transferring a collection of source text and at least a portion of a corresponding translation to a reliable modification source. It is respectfully submitted that the cited D'Agostini reference fails to teach or suggest transferring information as recited. In accordance with the D'Agostini, source text and corresponding translations are never transferred but are instead simply presented to a user through a graphical user interface. For at least this reason, it is respectfully submitted that independent claim 17 is in allowable form.

Claims 18-28 are dependent upon independent claim 17 and were similarly rejected. It is respectfully submitted that these dependent claims are patentably distinguishable from the D'Agostini reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of these dependent claims are allowable based on the merit of their own claim limitations. For example, dependent claim 18 recites generating a confidence metric and utilizing that metric as a basis for selecting a portion of a translation to be transferred to the reliable modification source. This is but one example of a dependent claim that is neither taught nor suggested by the D'Agostini reference.

Independent claim 29 recites a method that includes transmitting a portion of a translation that is identified with a low confidence metric across a computer network to a reliable modification source. It is respectfully pointed out that the D'Agostini reference fails to teach or suggest any transfer of a low confidence portion of a translation to a reliable modification source. For at least this reason, it is respectfully submitted that independent claim 29 is in allowable form.

Dependent claims 30-38 are dependent upon independent claim 29 and were similarly recited in light of the D'Agostini reference. It is respectfully submitted that these dependent claims are patentably distinguishable from the D'Agostini reference at least for the same reasons that their affiliated independent claim is so distinguishable. Further, it is respectfully submitted that at least some of these dependent claims are allowable based on the merit of their own claim limitations. For example, claim 31 further defines the step of transmitting a low confidence portion of a translation across a computer network to a reliable modification source. The D'Agostini reference fails to teach or suggest such a transfer. This is but one example of a dependent claim that is in allowable form based on the merits of its own claim limitation.

Independent claim 39 recites a first automatic translator that is implemented on a computing device that is separate from a computing device upon which a second automatic translator is implemented. The second automatic translator is provided with a source text and a corrected version of an attempted translation. The second automatic translator processes the source text and the corrected version of the attempted translation to produce training information. The training information is transferred to the second computing device and assimilated so as to enable the first automatic translator to translate with greater accuracy text similar to the source text. The D'Agostini reference fails to teach or suggest these limitations, and also fails to teach or suggest the limitations of dependent claims 40 and 41.

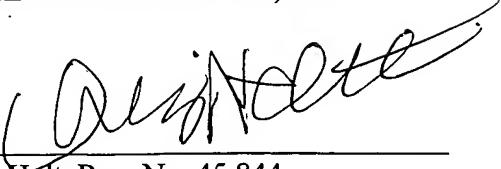
V. **SUMMARY**

In summary, it is respectfully submitted that Examiner's four rejections fail to teach or suggest the limitations of claims 1-39. Reconsideration and allowance of claims 1-39 are respectfully solicited.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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